

Remarks

Claims 1, 2 and 12 have been amended, and new claims 14-20 have been added. Support for the amendments to the claims and new claims can be found in general throughout Applicant's Specification and in particular, for example, as follows: claim 1, page 3, lines 22-26 and page 5, lines 8-15, claim 12, page 3, lines 22-26, claim 14, page 1, lines 24-26, page 3, lines 22-26 and page 5, lines 8-15, claim 15, original claim 10 and page 5, lines 8-9, claim 16, page 4, lines 22-24, claim 17, original claim 12 and the Examples on pages 7-11, claims 18-20, and page 5, lines 16-21.

As a preliminary matter, Applicant wishes to clarify misstatements made by its representative in the March 31, 2006 Amendment. The statements made at page 5 of the March 31<sup>st</sup> Amendment pertaining to Lancesser et al. contained an inaccuracy. In particular, Applicant now corrects the record to reflect that the disclosure of Lancesser et al. pertaining to elastomers does not include any amorphous polyalphaolefin polymers. Applicant's representative's statements to the contrary were incorrect, contrary to scientific fact and are hereby disavowed.

Applicant submits that the amendments to claims 1 and 2 render moot the rejections thereof under 35 U.S.C. § 112, second paragraph, and respectfully request that it be withdrawn.

Previously pending claims 1, 2, 12, and 13 stood rejected under 35 U.S.C. § 102(b) over Paeglis et al. (U.S. 5,569,516).

Paeglis et al. disclose a composition consisting essentially of a copolymer that includes a mixture of ethylene, one or more alphaolefins, and optionally, a diene. Paeglis et al. further disclose that the copolymers can contain from about 60 % by weight to 90 % by weight ethylene and 10 % by weight to 40 % by weight propylene or other alpha-olefin based on the weight of the copolymer. Paeglis et al. also disclose that single ply roofing membranes formed from their thermoplastic elastomers can include an oil adsorbent filler when the membrane also includes a large amount of plasticizer oil, e.g., 60 parts per 100 parts elastomer. The oil adsorbent filler is included to reduce or eliminate bleed-out from the plasticizer oil

Claim 1 is now directed to an adsorbent composition that includes from 30 % by weight to 80 % by weight amorphous polyalphaolefin polymer, and from 20 % by weight

to about 70 % by weight adsorbent selected from the group consisting of moisture adsorbents, volatile organic adsorbents, and combinations thereof, the composition being essentially free of film forming agent selected from the group consisting of butyl rubber, polyisobutylene and combinations thereof, wherein the composition adsorbs at least one of moisture and volatile organic species from the atmosphere to which it is exposed. The amendments to claim 1 render moot the rejection of claim 1 under 35 U.S.C. § 102(b) over Paeglis et al. In particular, claim 1 is now directed to an adsorbent composition that includes an adsorbent selected from the group consisting of moisture adsorbents, volatile organic adsorbents and combinations thereof, and that adsorb moisture or a volatile organic species from the atmosphere to which the composition is exposed. Paeglis et al. do not teach an adsorbent composition or a composition that adsorbs moisture or volatile organic species from the atmosphere to which it is exposed. Rather, Paeglis et al. disclose an elastomer and a one ply roofing membrane (see, Paeglis et al., col. 1, lines 61-64 and col. 7, lines 39-51). A one ply roofing membrane is not an adsorbent composition. Applicant submits, therefore, that the rejection of claim 1 under 35 U.S.C. § 102(b) over Paeglis et al. has been overcome and respectfully requests that it be withdrawn. Applicant also notes that the amendments to claim 1 render it unnecessary to comment on the specific statements in the September 1, 2006 Office action with respect thereto or to address the veracity of the same. However, Applicant hereby expressly makes of record that fact that Applicant does not acquiesce in the veracity of those statements.

Claims 2, 12 and 13 are distinguishable under 35 U.S.C. § 102(b) over Paeglis et al. for at least the same reasons set forth above in distinguishing claim 1.

Claims 3-11 stand rejected under 35 U.S.C. § 103 over Paeglis et al.

The discussion of the disclosure of Paeglis et al. set forth above is incorporated herein.

Applicant submits that the amendment to claim 1 renders moot the rejection of claims 3-9 and 11 under 35 U.S.C. § 103 over Paeglis et al. and respectfully requests that it be withdrawn.

Previously pending claim 10, which has been rewritten in independent form as new claim 15, is directed to an insulating glass assembly that includes a first glass substrate, a second glass substrate, a separator disposed between the first glass substrate

and the second glass substrate, and a composition that includes amorphous polyalphaolefin polymer, and from about 20 % by weight to about 70 % by weight adsorbent, and that is essentially free of a film forming agent selected from the group consisting of butyl rubber, polyisobutylene and combinations thereof in contact with the separator. In order to establish a *prima facie* case of obviousness, “the prior art reference (or references when combined) must teach or suggest all of the claim limitations.”

M.P.E.P. 2142. Paeglis et al. do not teach or suggest an insulating glass assembly --let alone an insulating glass assembly that includes a first glass substrate, a second glass substrate, a separator disposed between the first glass substrate and the second glass substrate, and a composition in contact with the separator. Rather, Paeglis et al. disclose that, in addition to roofing applications, the thermoplastic elastomer can be used in a long list of applications that includes, e.g., waterproof and weatherproof sheeting or covering, hose, tubes, seals, rub strips, roll covers, roll covers, gaskets, panels, trim, insulation, weather stripping, glazing, wire and cable, and automotive applications (see, Paeglis et al., col. 8, lines 61-67). An insulating glass unit is not among the items listed in Paeglis et al. *Id.* Moreover, Paeglis et al. do not teach or suggest utilizing their single ply roofing membrane formulation in the various applications set forth in their long list of applications. In other words, Paeglis et al. do not teach or suggest combining their thermoplastic elastomer with any other component for use in the listed applications. Rather, Paeglis et al. disclose that their thermoplastic elastomer can be used in the listed applications. Paeglis et al. do not teach or suggest using a composition that includes a polyalphaolefin and an adsorbent in an insulating glass unit. Accordingly, Paeglis et al. fail to teach a required element of previously pending claim 10, i.e., new claim 15. Applicant submits, therefore, that the rejection of previously pending claim 10, now claim 15, under 35 U.S.C. § 103 over Paeglis et al. is unwarranted and respectfully request that it be withdrawn.

Claims 1-13 stand rejected under 35 U.S.C. § 103 over either Lafond (U.S. 5,436,040) or Lancesseur (U.S. 5,432,214) in view of McConnell et al. (U.S. 3,954,697).

Lafond discloses a sealant strip for use in fabricating insulated glass assemblies. The sealant strip is formed from a solid or foamed cellular structure made from a thermoplastic or thermal setting polymeric material. Lafond lists a number of

representative examples of such materials including polyurethanes, polyolefins, polysilicones, and polyvinylchlorides. Lafond further discloses that for sealant strips formed from solid structures, materials such as butyol polymers, ethylene polymers and polyamides may be employed. Lafond also discloses that when high insulating properties are desired, polysilicones and polyurethanes are particularly desirable. According to Lafond, these latter mentioned products are employed in the form of a foam.

Lancesseur discloses a composition that includes thermoplastic or thermosetting polymers, dehydration agents, one or more elastomers, and fibers. Lancesseur discloses that the thermoplastic or thermosetting polymers are present in his composition in an amount of from 50 % by weight to 80 % by weight. Lancesseur further discloses that the dehydration agent is present in his composition in the amount of from 20 % by weight to 50 % by weight.

McConnell et al. disclose a single component hot-melt, pressure sensitive adhesive composition that consists of an amorphous propylene/higher 1-olefin copolymer.

We first address the rejection of claim 1 under 35 U.S.C. § 103 over Lafond in view of McConnell. Claim 1 is now directed to an adsorbent composition that includes from 30 % by weight to 80 % by weight amorphous polyalphaolefin polymer, and from 20 % by weight to about 70 % by weight adsorbent selected from the group consisting of moisture adsorbents, volatile organic adsorbents, and combinations thereof, the composition being essentially free of film forming agent selected from the group consisting of butyl rubber, polyisobutylene and combinations thereof. It is undisputed that Lafond does not teach a composition that includes an amorphous polyalphaolefin or a composition that includes from 30 % by weight to 80 % by weight amorphous polyalphaolefin polymer (see, September 1, 2006 Office action, page 5). It is noteworthy that Lafond discloses a preference for compositions that include polyurethanes and polysilicones (see, Lafond, col. 2, lines 50-55).

McConnell et al. do not cure the deficiencies of Lafond. McConnell et al. disclose single component, hot melt pressure-sensitive adhesives (see, McConnell et al., col. 2, lines 26-28). McConnell et al. do not teach or suggest combining their single component hot melt pressure sensitive adhesive, which consists of a specific olefin

copolymer, with any other component. To the contrary, McConnell et al. expressly disclose that their adhesive compositions have adequate pressure-sensitive adhesive properties without the addition of other chemical components (see, *Id.* at col. 2, lines 34-39). Thus, McConnell et al. teach away from combining their olefin copolymer with another chemical component. McConnell et al. also do not teach or suggest using their hot melt pressure sensitive adhesive in a sealant composition or in a solid or foamed sealant strip such as the one disclosed in Lafond. McConnell et al. also do not teach or suggest that their hot melt pressure sensitive adhesive would be suitable for use in the solid or foamed structure of Lafond. Nothing in the record establishes anything to the contrary.

In the September 1<sup>st</sup> Office action the Examiner asserted that the Abstract and column 4, lines 1-12 of McConnell et al. disclose that it is known to use low crystallinity polyalphaolefin polymers in a hot melt adhesive. The disclosure in McConnell et al. at column 4, lines 11-12, refers to the fact that the low order of polypropylene-type crystallinity of their polymers accounts for their good cohesive strength in pressure sensitive adhesive applications. Lafond does not teach or suggest that his strips include hot melt pressure sensitive adhesive compositions. Therefore the skilled artisan would find the cited passage from McConnell et al. to have no bearing on the sealant strips of Lafond and would have no reason to *sua sponte* substitute the hot melt pressure sensitive adhesive of McConnell et al. for the thermoplastic or thermosetting polymeric material of Lafond. For this reason alone Applicant submits that the rejection of claim 1 under 35 U.S.C. § 103 over Lafond in view of McConnell et al. is unwarranted and respectfully requests that it be withdrawn.

The proposed combination of Lafond and McConnell et al. is further deficient for at least the following additional reason. Neither Lafond nor McConnell et al. teach or suggest including from 30 % by weight to 80 % by weight amorphous polyalphaolefin polymer in a composition that also includes adsorbent. The proposed combination of Lafond and McConnell et al. thus fails to teach a required element of claim 1. Applicant submits, therefore, that the rejection of claim 1 under 35 U.S.C. § 103 over Lafond in view of McConnell et al. is unwarranted and respectfully requests that it be withdrawn.

Applicant notes that it appears that the September 1<sup>st</sup> Office action relies on Lancesseur in support of the rejection of claim 1 under 35 U.S.C. § 103 over Lafond in view of McConnell et al. However, Applicant does not understand what teaching or suggestion in Lancesseur directs the skilled artisan to modify the sealant strip of Lafond. To the extent this rejection is maintained, Applicant respectfully requests clarification of the same.

We now address the rejection of claim 1 under 35 U.S.C. § 103 over Lancesseur in view of McConnell et al. As set forth above, claim 1 is now directed to an adsorbent composition that includes from 30 % by weight to 80 % by weight amorphous polyalphaolefin polymer, and from 20 % by weight to about 70 % by weight adsorbent selected from the group consisting of moisture adsorbents, volatile organic adsorbents, and combinations thereof, the composition being essentially free of film forming agent selected from the group consisting of butyl rubber, polyisobutylene and combinations thereof. Applicant again notes that Applicant's representative was under the mistaken belief that the list of elastomers in Lancesseur included an amorphous polyalphaolefin polymer. Since this is not the case and to assert otherwise would be contrary to scientific fact, as recognized by the Examiner at page 5 of the September 1<sup>st</sup> Office action, it cannot be disputed that Lancesseur does not teach an amorphous polyalphaolefin polymer. In addition, it is undisputed that Lancesseur does not teach a composition that includes from 30 % by weight to 80 % by weight amorphous polyalphaolefin polymer.

McConnell et al. do not cure the deficiencies of Lancesseur. McConnell et al. disclose single component, hot melt pressure-sensitive adhesives (see, McConnell et al., col. 2, lines 26-28). McConnell et al. do not teach or suggest combining their single component hot melt pressure sensitive adhesive, which consists of a specific olefin copolymer, with any other component. To the contrary, McConnell et al. expressly disclose that their adhesive compositions, i.e., their specific olefin copolymers, have adequate pressure-sensitive adhesive properties without the addition of other chemical components (see, *Id.* at col. 2, lines 34-39). Thus, McConnell et al. teach away from combining their olefin copolymers with another component. McConnell et al. also do not teach or suggest using their olefin copolymers in any other composition, in general, or in the plastic dehydrating material such as the one disclosed in Lancesseur, in particular.

Moreover, nothing in McConnell et al. teaches or suggests that their olefin copolymer would be suitable for use in the plastic dehydrating material of Lancesseur. Therefore, the skilled artisan would have no reason to *sua sponte* substitute the olefin copolymer of McConnell et al. for the thermoplastic or thermosetting polymers of Lancesseur.

The September 1<sup>st</sup> Office action cites the disclosure in McConnell et al. at column 4, lines 1-12 as providing the requisite motivation to combine McConnell et al. with Lafond or Lancesseur. However, the cited passage discloses, “the low order of polypropylene-type crystallinity ... accounts for their good cohesive strength in pressure-sensitive adhesive applications.” (Emphasis added.) Lancesseur does not teach or suggest a pressure-sensitive adhesive composition. Lancesseur is directed to plastic dehydrating materials. Lancesseur does not teach or suggest that his plastic dehydrating material is a pressure-sensitive adhesive. Therefore, the skilled artisan familiar with Lancesseur would find McConnell et al., in general, and the cited passage, in particular, to have no bearing on Lancesseur.

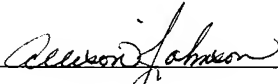
The proposed combination of Lancesseur and McConnell et al. is further deficient in that neither Lancesseur nor McConnell et al. teach or suggest a composition that includes from 30 % by weight to 80 % by weight amorphous polyalphaolefin polymer and adsorbent. Therefore, the proposed combination fails to teach a required element of the composition of claim 1. Applicant submits, therefore, that a *prima facie* case of obviousness of claim 1 over Lancesseur and McConnell et al. has not been made. Accordingly, the rejection of claim 1 under 35 U.S.C. § 103 over Lancesseur in view of McConnell et al. is unwarranted and Applicant respectfully requests that it be withdrawn.

There being no further rejections of record, Applicant submits that the claims now pending are in condition for allowance and such action is respectfully requested. Applicant invites the Examiner to telephone the undersigned should a teleconference interview facilitate prosecution of this application.

Please charge any additional fees that may be required or credit any overpayment made to Deposit Account No. 06-2241.

Respectfully submitted,

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